Introducing Ramionics (Ramin Theory & Ramion Based Physics) To Resolve the Fine-Structure Constant and Dark Matter Problems By Ramin Khosravi (KSA)

Last version on Youtube @Ramunics

Ramionics@Gmail.com

RaminKhosravi.London@gmail.com

mehdi.khosraviport.ac.uk

Ramionics Ltd

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Introduction and energy equation

Ramin's Ramion theory explains how this universe is made from **only and only exactly one basic particle** (at FCC lattice) named Ramion (Rotational **A**nti-matter and **M**atter **I**on): an absolute energy E_r in form of **three-dimensional sphere** with real, measurable or calculatable parameters like energy E_r, pressure **P** ,energy density $\rho_r=\frac{E_r}{V}$,volume **V=** $\frac{4\pi}{3}r^3$**,** radius **r** ,angular speed **ω**, rotational speed on its surface(**v=r. ω =c=light speed**) , torque **T**, Moment inertia **I**, mass equivalent to its energy $m=\frac{E_r}{c^2}$ and even spin and electrical charge $\pm q_r$ and two poles: north and south! In ramionics we need no extra dimension in space or time and no imaginal or modelled parameters or particles.

Ramions **generate, contains, transport, define, formulate, and Explain** any fundamental thing in physics:

space, time, compatible relativity + quantum,

matter, antimatter and their asymmetry,

gravity and so called dark matter, Time dilation,

energy, so called dark energy, space energy causing space expansion,

all elementary forces: gravity (+strong nuclear force), electromagnetic (+weak nuclear force),

elementary particles structure geometry,

physics constants like fine structure constant or ratio of elementary particles mass or electrical charges,

entanglement, warm hole, black hole, multiverse.

Energy:

Ramions have **exactly equal linear and rotational parts of energy** or force

Linear → pressure→ gravity (and strong Nuclear force) →relativity

rotational → Torque→ Electrical (and weak nuclear force) →Electromagnetics

Basic equation of Ramionics (including 12 equations)

(1) $$E_r = m c^2 = \{\rho_r V = \frac{\rho_s}{\varphi} V\} = \{\hbar \omega_m = \frac{\hbar v_m}{r_m}\} = \{\frac{1}{2} m c^2 = PV\}$$
$$+\{\frac{1}{2} m c^2 = \frac{1}{2} I \omega^2 = \frac{1}{2} Tr = (2) E_{PE} = (2)\left(\frac{k_r q_r^{\,2}}{2 r}\right) = (2)\left(\frac{q_r^{\,2}}{4 \pi \varepsilon_r 2 r}\right)\}$$

Ramion has no problem to have speed of light because it's in energy mode (not matter) and also ramion generate space and time for observers and local users itself.

In pressure-gravity part of basic equation we see

(2) $$\rho_r = 2P \longleftrightarrow E = 2PV$$

also in thermodynamics we have $E = \frac{f_r}{2} PV$ **that means** $f_r = 4$ when f_r is degree of freedom dimensions . we also can calculate it: 3 dimensions for location and 3 dimensions for ω, reduction of 2 dimensions for the equipotential surfaces results in 4.

In rotational-electrical part of basic equation highlighted (2) multipliers (with parenthesis) represent (2) semi-spheres of ramion. E_{PE} is electrical Potential energy. We know that similar electrical charges repel each other so collecting them on any surface needs energy that can be calculated by two simple integrals:

(3) $$E_{\Delta Q} = \int_{\infty}^{R} F dr = \int_{\infty}^{R} \frac{kQ\Delta q}{r^2} dr = \frac{-kQ\Delta q}{R^2}, E_{PE} = \int_{0}^{Q} \frac{k q dq}{r} = \frac{kQ^2}{2r}$$

Negative sign means energy is save for Δq and we consider positive E_{PE}

As saved energy. Basic equation shows electrical charge is only a mechanical concept (Area × Torque**)** and we know the magnetic field and Electromagnetic wave are generated by

rotating or changes in Electrical field in their turn as Maxwell's laws explain.

North and south Semi sphere of ramions have reversed torque and consequently reversed electrical charges. In energy calculation they are appeared as q_r^2so adds together as positive. In torque or electrical charge they are $\pm q_r$∧¿ compensate each other.

If we consider total electrical charge of ramion, it's 0 then we have to calculate equivalent energy as Torque instead of electrical charge.

In Quantum part of basic equation *wesee*

(4) $\hbar \omega_m = \frac{\hbar v_m}{r_m}$

so we can calculate plank constant and fine structure constant easily! For Ramions (as **EnergyPackets when carry Electromagnetic waves**) or any **EnergyLike** matter particles (means particles with equal rotational and pressuring Energy), We can define and calculate plank constant by $E = \hbar \omega_m$

It's important that Angular speed ω_m and radius r_m and velocity at radius $v_m$are in **matter state** (and not exactly equal to ω and v and and r that belong to **energy state** of Ramion).

We can simplify basic equation easily:

(5) $\hbar \omega_m = I\omega^2 = \frac{k_r q_r^2}{r}$

(6) $I = k_I m r^2$

$k_I examples: \frac{2}{5} for sphere, 1 for loop, 2 for Ramion$

(7) $r_m E = \sqrt{\frac{2}{k_I}} c\hbar = k_r q_r^2$

We know $q_r^2=(\frac{e}{12})^2=\frac{e^2}{144}$ because we know in ramionics that any matter particle (neutrino, Baryon or huge blackHole is a blackHole surrounded by 12 ramion. so:

(8) $\frac{1}{\alpha} ¿ \frac{c\hbar}{k_r e^2}=144\sqrt{\frac{k_I}{2}}$: Fine structure constant for ramions

Using 36390 as number of ramions in any baryon, We will show:

(9) $\frac{1}{\alpha}=16\pi\left(\frac{10\sqrt{2}}{\pi}\right)^{\frac{2}{3}}\left(1-\frac{1}{36390}\right)=137.03$ for barions

Also using 12 and 36390 in FCC lattice-texture-framwork we can calculate mass and electrical charge of elementary particles (passing as-yet unexplored frontiers of human knowledge)

In cosmological part of basic equation we see:

(10) $\rho_r=\frac{\rho_s}{\varphi}\vee\rho_s=\varphi\rho_r$

means energy density of space (so called dark energy) is ramions energy in their volume by factor of $\varphi=\frac{\pi}{3\sqrt{2}}=74\%$ that is the occupancy of ramions in their FCC lattice. We will show:

(11) $C^4=8\pi G\rho_s R_D^2 where\ G is gravity\ constant$

This equation relates Dark matter, Dark energy, Ramion Energy

And reality of Dark matter (forgotten gravity)

(12) $g=\frac{GM}{R}\left(\frac{1}{R}+\frac{1}{R_D}\right)e^{\frac{-R}{R_D}}$

Geometry of Space Structure in Ramin Theory

Because the ramions repel one another in all directions, they ultimately reach a state of maximal compression. But in large scale they cause space and time to expand (dark energy's role).

So $p=\frac{\rho_r}{2}$ is the maximum capability of pressure, of cource there is many fluctuations (and also a little indentation for electromagnetic carrying) but high pressure in long time or hard collisions can cause the ramion to be collapsed and introduced to space (converting energy to mass)

Although usually both models (the FCC and HPC hexagonal) can be considered for ramion geometry, the FCC model, yields a softer space.

In the FCC model, each ramion has twelve nearest neighbours in the next layer, all tangent to it means layer 1 is very strong.

Crystal Lattices — (FCC, BCC, HCP, Diamond)

Structure	Atoms/ Cell	CN	Packing (APF)	Slip / Planes	Elements	Alloys & Applications	Mechanical Behavior
FCC (Face-Centered Cubic)	4	12	0.74 (74%); Vf = 0.74	12 slip systems on {111}<110> (close-packed) — easy slip	Al, Cu, Ni, Ag, Au, Pt, Pb, Ir, Pd	Austenitic stainless (γ-Fe), Ni superalloys (Inconel), Al-alloys (2xxx/6xxx/7xxx), Cu-alloys	Very ductile & tough; low DBTT; excellent formability
BCC (Body-Centered Cubic)	2	8	0.68 (68%); Vf = 0.68	{110}, {112}, {123}<111>; no close-packed planes → higher Peierls stress	α-Fe, Cr, W, Mo, V, Nb, Ta	Ferritic/ martensitic steels, low-alloy steels; high-T strength (W, Mo)	Strong, less ductile; DBTT present; often harder/brittle at low T
HCP (Hexagonal Close-	6	12	0.74 (74%); Vf = 0.74	Basal {0001}<11-20> + prismatic/pyra	Mg, Ti(α), Zn, Zr, Co, Cd	Ti-6Al-4V (α+β), Mg-alloys (AZ31, ZK60), Zr-	Good specific strength; lower

Packed)				midal; anisotropic; limited slip at RT		alloys (nuclear cladding)	ductility at RT; texture-dependent
Diamond Cubic (Covalent)	8	4	≈0.34 (≈34 %) ; Vf ≈ 0.34	Strong tetrahedral covalent bonds; cleavage on {111}	C (diamond), Si, Ge (SiC related polytypes)	Semiconductors (Si, Ge); diamond cutting/abrasives; heat spreaders	Extremely hard, brittle; Si/Ge are semiconductors

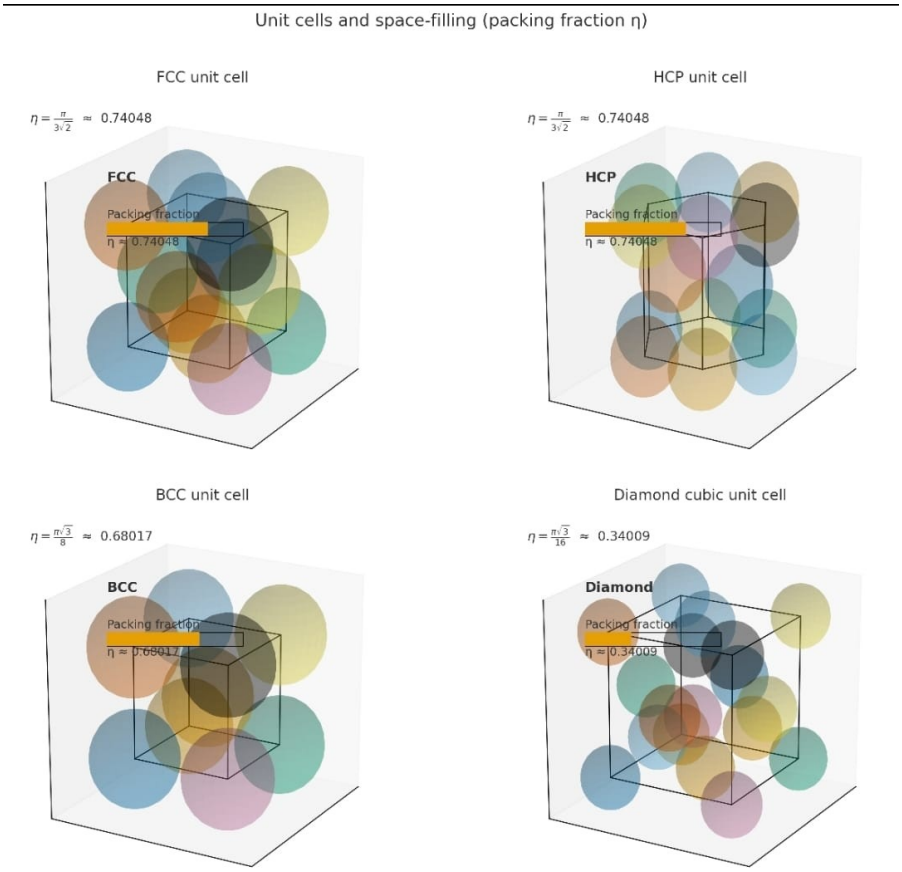


Figure 1

Geometry shows number of ramions in layer n as follows:

(13) L(n)=10n^2+2

for example L(1)=12, L(2)=42 but **L(0)=1 centre**

IL(t)=Rounded up of Inverse Function of L

The cumulative number up to and including layer N is:

(14) $T(n) = (1\ for\ centre) + ¿ \sum_{k=1}^{n} (10k^2 + 2¿) ¿$

(15) $T(n) = (1\ for\ centre) + \frac{10n^3 + 15n^2 + 11n}{3}$

IT(t)=Rounded up of Inverse Function of T

(16) $\varphi = \frac{\pi}{3\sqrt{2}} = 0.74048048969$ volume occupancy factor

Ramion theory introduces two new geometry constant: φ’ and β:

For layers sufficiently distant from the assumed centre, we have:

(17) $\varphi \frac{4\pi}{3} R^3 = N(n) \frac{4}{3} \pi r^3$

(18) $R = \varphi' n(2r) \quad \varphi' : diameter\ factor$

(19) $\varphi \frac{4\pi}{3} (\varphi' n(2r))^3 = (10n^2) \frac{4}{3} \pi r^3$

(20) $\varphi' = \sqrt[3]{\frac{10}{24\varphi}} = \sqrt[3]{\frac{10\sqrt{2}}{8\pi}} = 0.8255785095$

Whether we consider ramions covered area as circle πr^2 of their cross section area to layer sphere **or** as a hemisphere surface $\frac{4\pi r^2}{2}$ but with applying the cosine factor of vector multiplication,

the ratio of the ramions covered area to the layer area is **β**

(21) $(10n^2 + 2)\pi r^2 = \beta 4\pi R^2 = \beta(4\pi)(\varphi' n 2R)^2$

(22) $\rightarrow \beta = \frac{10}{16\varphi^2} = \frac{10}{16(\frac{10\sqrt{2}}{8\pi})^{\frac{2}{3}}} = 0.91698716849$

We will see this parameters in fine structure constant that approves the geometry of energy distribution in the space means ramion lattice texture.

Quantomised Gravity, Relativity, Strong Forece and so called Dark Matter

(23) $\rho_S=\varphi\rho_r= 0.74$ $\rho_r\rho_r=\frac{\rho_s}{\varphi}$

ρ_r: Ramion volume energy density

ρ_s: Space Energy density

Not only matters are not created by stopping or concentration of energy but also Matters (for particles or even huge black holes) are collapsing some ramions and distributing their energy into other ramions in the space, more closer more share of energy. After that a black hole remains with radius of r1=R_H and velocity of v1. This hole equation is same in elementary particles in an atom or huge black holes in the space. 12 expanded ramions with r1 radius surround that hole. so not only light, but also mass is a wave in space. There is no particle-wave paradox except what our observation (by eye or device) and technology prefers or lets us.

When Ramions get extra energy they can't save it by increasing their pressure or velocity (light speed C) is on maximum value for this universe and there is no space to increase volume. They can tolerate a little extra pressure but only as fluctuation or short time in their dynamics and not in steady state, else they collapse consequently. Only remained way is expanding space itself. But time (for observer on ramions surface) also must be expanded (dialled) with same factor (to save c and energy values)also Space expansion factor must exactly Balance Force on any Ramion and also on its layer simultaneously:

(24) $F_{(R)}=F_s \rightarrow r_{(R)}^{\,2} P'_{(R)}=r_s^{\,2} P_r \rightarrow r_{(R)}^{\,2} \rho'_{(R)}=r_s^{\,2}\rho_r$ F_s,r_s,t_s:

bond force $\wedge$ *radius* $(¿ 2\pi r) \wedge$ *period time absolute values*

means *for ramion at far steady state space*

F, r, t: relative values sensed & observed at any ramions surface

$P'_{(R)} \wedge \rho'_{(R)}$: relative (not absolute) energy density and pressure as the observer on surface of ramion senses.

They are less than P_r and ρ_r so simulate a vacuum and gravity to the hole interpreted as matter.

(25) $\rho'_{(R)}=\rho_s$¿)

(26) $P'_{(R)}=P_s(1-f_{(R)})$

Function $f_{(R)}$ is defined to simplify solving equations.

(27) $t_{(R)}=t_s/\sqrt{1-f_{(R)}}=t_s\sqrt{\frac{\rho_s}{\rho'_s}}$

(28) $r_{(R)}=r_s/\sqrt{1-f_{(R)}}=r_s\sqrt{\frac{\rho_s}{\rho'_s}}$

Force on m2 is calculated by integralling $p'\times dS$ on its surface:

(29) $F=\int_{\square}^{\square} P'\times dS \rightarrow\rightarrow F=(V_{m2}=\frac{m_2C^2}{\rho_s})\ (\frac{-\partial P}{\partial R})$

g: gravity acceleration toward centre means –F/m_2

(30) $F=\frac{m_2C^2}{\rho_s}\ (\frac{-dP}{dR})\ \rightarrow g=\frac{-F}{m_2}=\frac{c^2}{2}\left(\frac{-df}{dR}\right)$

energy balance equation:

(31) $m_1C^2=E_{m1}=\int_0^\infty(\rho_s-\rho)4\pi R^2dR$

(32) $m_1C^2=4\pi\rho_s\int_0^\infty fR^2dR$

So we have 3 criteria's:

a) $f(R)Function$Must be monotonically decreasing functions, tend to zero when r→∞ and also must limited between 0 to 1

b) $\left(\frac{-df}{dR}\right)functions$Must be monotonically decreasing functions, tend to zero as r→∞,

c¿$integral(\int_0^\infty fR^2dR)$ Must be finite and positive, so that energy can be balanced.

The general solution:

(33) $f = (\frac{B}{R})^{k} \exp(-(\frac{R}{A})^{P})$

factor $(\frac{B}{R})^{k}$ is needed to decrease function in close R when

exponential factor $\exp(-(\frac{R}{A})^{P})$ is almost 1, exponential factor is needed to limit the calculated energy, forgetting this part leaded to dark matter idea.

In very close or accurate calculation we have to compute discrete equations of FCC lattice, all needed equations or supported in ramionics, but in most application continues analyses is enough:

Solution A: Integer k and p

(34) $f = \sum f_{kp} = \sum (\frac{B}{R})^{k} \exp(-(\frac{R}{A})^{P})$

(35) Gravitational Acceleration:

$$g=\sum g_{kp}=\sum \frac{C^2}{2}\left(\frac{-df_{kp}}{d_R}\right)=\frac{C^2}{2}\sum (\frac{B}{R})^{k}\frac{1}{R}\left\{k+p(\frac{R}{A})^{p}\right\} \exp\left(-(\frac{R}{A})^{P}\right)$$

(36) Energy Balance: $E=\sum E_{kp}=¿\sum 4\pi\rho_s B_{\square}^{k} A_{\square}^{3-k} z_k(p)¿$

(37) $z_k(p)=\left(\frac{1}{p}\right)\Gamma\left(\frac{3-k}{p}\right) when\, \Gamma(n)=(n-1)!$ Gamma function

necessary conditions means

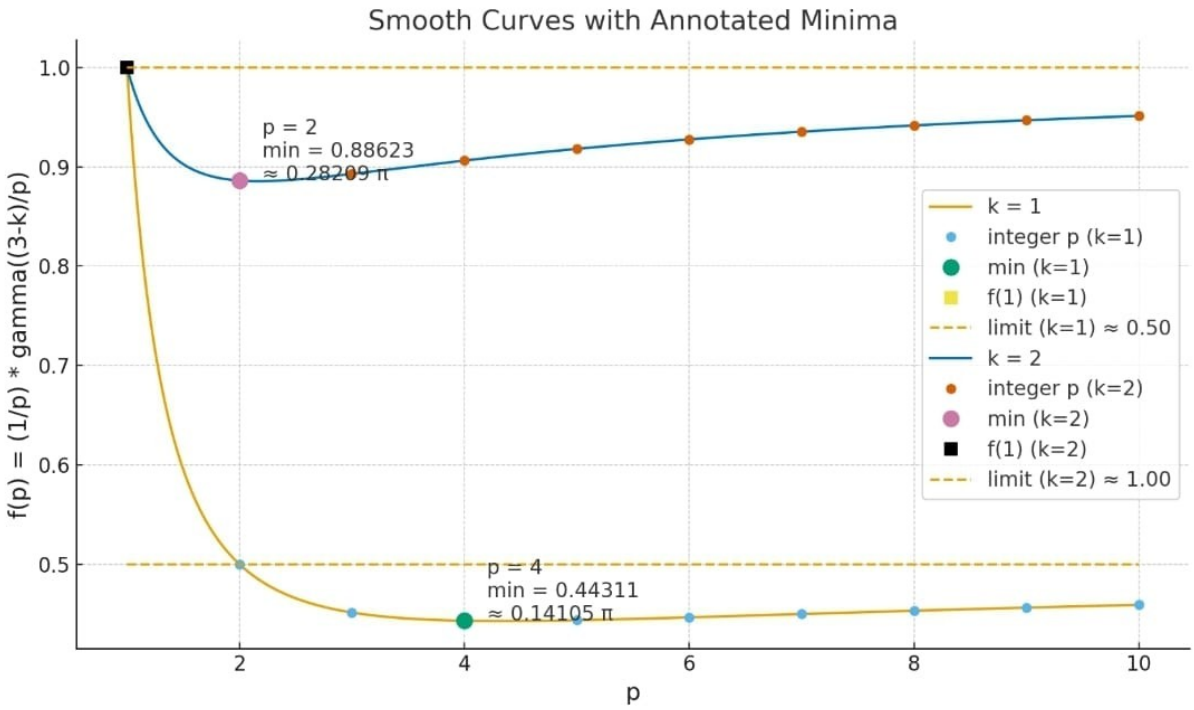
(38) $0 < p \leq k < 3$

Therefore: we have 3 terms in answer

K=1, t=1 Long Range Gravity: consist of bright Gravity (proportional to 1/R2 as great Newton and great Einstein said) and Dark Gravity at far range (so called dark matter that Ramion Theory explains and models it simply without any dark matter particle)

K=2, t=1 Middle Range Gravity (between short and long) maybe help to fit curves because sum of them must be limited between 0 to 1

K=2, t=2 short Range Gravity means Strong nuclear force



(39) $$\rho'_s=\rho_s\left(1-\frac{R_F}{R}e^{\frac{-R}{R_D}}-\left(\frac{B_1}{R}\right)^2 e^{\frac{-R}{A_1}}-\left(\frac{B_2}{R}\right)^2 e^{-\left(\frac{R}{A_2}\right)^2}\right)$$

(40) $$g=\frac{C^2}{2R}\left\{\begin{array}{c}\frac{R_F}{R^{\square}}\left(1+1\left(\frac{R}{R_D}\right)^1\right)e^{\frac{-R}{R_D}}\\ ¿+\left(\frac{B_1}{R}\right)^2\left(2+1\left(\frac{R}{A_1}\right)^1\right)e^{\frac{-R}{A_1}}\\ ¿+\left(\frac{B_2}{R}\right)^2\left(2+2\left(\frac{R}{A_2}\right)^2\right)e^{-\left(\frac{R}{A_2}\right)^2}\end{array}\right\}$$

In energy balancing we can ignore energy of k=2 parts:

(41) $R_F=\frac{2GM}{RC^2}$ and $g=\frac{GM}{R}\left(\frac{1}{R}+\frac{1}{R_D}\right)e^{\frac{-R}{R_D}}$

(42) $$E=4\pi\rho_s\left\{\begin{array}{c} R_F^1 R_D^2 \int_0^\infty x\, e^{-(x)^1}\, dx \\ + B_1{}^2 A_1{}^1 \int_0^\infty x^2\, e^{-(x)^1}\, dx \\ + B_2{}^2 A_2{}^1 \int_0^\infty x^2\, e^{-(x)^2}\, dx \end{array}\right\}$$

(43) $$E=4\pi\rho_s R_F^1 R_D^2 \rightarrow E=4\pi\rho_s ¿= \frac{2GM}{RC^2} ¿ R_D^2$$

(44) → $C^4=8\pi G\rho_s R_D^2$ relating light speed c , G constant, space energy density $\rho_s$and radius of dark gravity observation R_D

About ρ_s

(45) If this estimation is correct $\rho_s=5.4+10^{-10}\frac{J}{m^3}$

Then:

(46) $R_D=9.46\,x10^{25}\,m=10^{10}\,LY$

If R_D is taken to be 10^6 times smaller (i.e. 10,000 light-year), then we must multiply $\rho_s$by 10^{12}; hence:

(47) $\rho_s=540\frac{J}{m^3}$

However, excessively large estimation of this energy density are incorrect.

Solution B: floating k and p

K and p are changed from 2 to 1 as R goes from R1 to ∞

(48) k=p=(1+$\frac{R_1}{R}$¿

$R_H radius\, of\, central\, hole$(where k=p=3)

$R_1=2R_H$ radius of fist FCC layer around the R_H (where k=p=2)

R→∞ whre (k=p=1)

(49) $$\rho'_s=\rho_s(1-f)=\rho_s\left(1-\left(\frac{R_F}{R}\right)^{(1+\frac{R_1}{R})}e^{-(\frac{R}{R_D})^{(1+\frac{R_1}{R})}}\right)$$

For long range R>>R_1 we see Bright and Dark gravity:

(50) $\rho'_s=\rho_s$¿)

(51) $$g=\frac{GM}{R}\left(\frac{1}{R}+\frac{1}{R_D}\right)e^{\frac{-R}{R_D}}$$

For short range R we see strong nuclear force:

(52) $$\rho'_s=\rho_s(1-\left(\frac{R_F}{R}\right)^2)e^{-\left(\frac{R}{R_D}\right)^2}$$)

(53) $$g=\frac{GM}{R^2}\left(2+2\left(\frac{R_F}{R}\right)^2 ¿ e^{-(\frac{R}{R_D})^2}\right)$$

energy balance result is very similar ¿ solution A:

(54) $$\int_{R_1}^{\infty} f4\pi R^2\,dR$$

$$=4\pi R_F R_D^2\left(\ 1+\frac{R_1}{R_D}(\ln(\frac{R_F}{R_D})+2\gamma\text{-}1)+O(\frac{R_1^2}{R_D^2}\ln(\frac{R_D}{R_1}))\ \right)$$

$\rightarrow C^4=8\pi G\rho_s R_D^2$ because $R_1 \ll R_D$

γ =0.5772156649 Euler – Mascheroni constant

O: big O function, Order of the error term, Asymptotic upper bond

(55) $$g\int_{\frac{R_1}{2}}^{R_1} f4\pi R^2\,dR=4\pi R F R_1^2\left(\frac{1}{2}\ln\left(\frac{R_F}{2R_1}\right)+\frac{7}{8}\right)$$

¿ $12\times(energy\ of\ any\ layer\ 1\ Ramion)$

Relativity and Time dilation

(56) $$t_{(R)}=\frac{t_s}{\sqrt{1-f_{(R)}}}=t_s\sqrt{\frac{\rho_s}{\rho'_s}=\frac{r^2}{r_s^2}}=t_s\frac{r}{r_s}$$

For example in long range part of gravity:

(57) $$t_{(R)}=\frac{t_s}{\sqrt{1-(\frac{R_F}{R})}}=\frac{t_s}{\sqrt{1-(\frac{2GM}{c^2R})}}$$

If a mass moves at speed **v**, we obtain the following relation:

(58) $$t_{(R)}=t_s\sqrt{1-(\frac{v^2}{c^2}=\frac{R_F}{R})}$$

There is no distinction between these two terms $\frac{v^2}{c^2}\vee\frac{R_F}{R}$ just as a body must *obtain* the speed V (escape velocity) to escape of gravity of *itself*.

However, the speed and the energy are observer-independent. When a mass “moves”, the ramions effectively move in the opposite direction because mass is a hole and distributed energy in all space.

In this theory we can study time dilation more than relativity or quantum theories by above formulas.

Energy of moving objects:

We can simply form R’ function like to R’(x,y,z) or R’(R,θ,φ) or R(r, φ,z) to obtain distance of any point in space to last position of object due to ratio of its (v or ω) to c.

(in fact gravitational wave is travelling by light speed because this is maximum speed of data or energy through Ramions unless a narrow net connects two Ramions by empty geometry between other Ramions in warm hole or entanglement state)

Anyway we consider gravity speed as c

(59) $$E=\rho_s\int\frac{R_F}{R'}e^{\frac{-R'}{R_D}}dV$$

for example in spherical:

(60) $$E=\rho_s\int\frac{R_F}{R'}e^{\frac{-R'}{R_D}}4\pi R^2\,dR$$

If an object moves with speed x along a straight line, every point in space (at distance R from it) senses it $v\Delta t$ behind, therefore:

(61) $$\Delta x=\{(\Delta t=\frac{R}{C})\times v\}=\frac{v}{C}R$$

(62) $$R'=\sqrt{\left(x+\frac{V}{C}R\right)^2+y^2+z^2}$$

(63) $$E=\frac{\rho_s 4\pi R_F R_D^2}{1-(\frac{V}{C})^2}=\frac{\rho_s 4\pi\frac{2GM}{C^2}R_D^2}{1-\frac{V^2}{C^2}}=\frac{MC^2}{1-\frac{V^2}{C^2}}$$

If an rotates on a circle of radius r with angular speed ω:

(64) $$\Delta\theta=(\Delta t=\frac{R}{C})w=\frac{w}{C}R$$

(65) $$R'=\sqrt{\left(x-r\cos\left(\frac{-\omega}{c}R\right)\right)^2+\left(y-r\sin\left(\frac{-\omega}{c}R\right)\right)^2+Z^2}$$

(66) $$\mathrm{E}=\rho_s\int\frac{R_F}{R'}e^{\frac{-R'}{R_D}}4\pi R^2\,dR=\rho_s R_F\pi R_D^2=MC^2$$

So in Ramin theory energy of rotating object on closed routes does not exceed MC^2.

So in Ramin theory, based on the path we simply and accurately compute the energy attributed to the object.

Electromagnetism, weak Force and Fine Structure constant

Each Ramion has a rotation, such that the m-equivalent of its energy rotates at the speed c:

(67) $$e=mc^2=\left(PV=\frac{1}{2}mc^2\right)+\left(\frac{1}{2}mc^2\right)$$

- Pressure part: $\left(PV=\frac{1}{2}mc^2\right)$
- Rotation part: $\left(\frac{1}{2}mc^2\right)$

The torque vector is positive at one pole and negative at the other; therefore each ramion has an equal amount of positive and negative electrical charge.

When a particle forms (i.e., a cavity or black hole devoid of ramion), then around that cavity, in a persistent manner, twelve swollen ramion are situated.[1]

These twelve Ramions are located around the cavity and must satisfy torque equilibrium. Therefore, they form pairs—two by two—that produce similar charge.

- As a result, we have six pairs with positive and negative charge.
  Among these six pairs, if all have the same sign, we have charge -e or +p.
- Thus, each Ramion has the electric charge as follows: $\pm\frac{e}{12}$
- If one pair is opposite to the others, then the net charge is:
- $\pm\frac{8}{12}e=\pm\frac{2}{3}e$
- And if two pairs are opposite to the other four pairs, the net charge will be as follows:

[1] **It is worth noting that the dynamics of this matter are also examined within Ramion theory, and there is scope for further study.**

(68) $\pm\frac{4}{12}e=\pm\frac{1}{3}e$

This Ramionics describe simply why the possible charges of any particle can only be the 7 following numbers:0 or $\pm 1 \vee \pm\frac{2}{3} \vee \pm\frac{1}{3}$

Therefore, each charged particle requires energy to create these charges (electrical charges), and this energy (noted st or p for structure or potential energy) is (according to the same relations discussed in the gravity section).

Electrical potential energy for one Baryon must be supported by neighburs. It is is received from other ramions in space (as positive energy) or (in equivalent interpretation: released into space as negative energy) anyway

(69) $E_1=\frac{Kq^2}{R_q}$; Energy needed to bring n ramions

if total energy of a particle is made¿ n ramion

(70) $E_p=\sum_{t=2}^{n}(t-1)\frac{K(Q/n)^2}{R_q}$

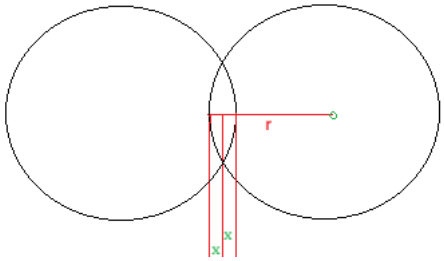
It should be noted that, in this part of the equation: $(t-1)$, the number 1 indicates that the first ramion requires no energy.

(71) $E_p=\frac{K}{R_q}\left(\frac{Q}{n}\right)^2\frac{n(n-1)}{n^2}=\frac{KQ^2}{R_q}\left(1-\frac{1}{n}\right)=\frac{KQ^2}{4\pi R_p}$

This coefficient: $\left(1-\frac{1}{n}\right)$, indicates the reduction in the required energy in the discrete, quantum case compared with assuming a continuous electric charge, and it is very important.

> The E_p like a negative energy or mass must be supplied by the surrounding ramions. No need to compress space! because getting energy reduces ramions pressure and let them to have a slight indentation into the others.

This Negative Equivalent Mass or energy and force (maybe in combination with the strong nuclear force) and possibility of collapsing Ramion because of too indentation is modelled by weak nuclear force.



$V_c = V_{Common}$ (On one side) $= 2\,V_{cap}$ (On both sides)

(72) $V_{common} = V_c = 2\,V_{cap} = 2\pi\left(x^2 r - \frac{1}{3}x^3\right)$ r, v: *ramions radius* and volume

x: indentation

(73) $\frac{V_c}{V} = \frac{3}{2}\left(\frac{x}{r}\right)^2 - \frac{1}{2}\left(\frac{x}{r}\right)^3$

(74) $\rho'_s = \rho_s\left(1 - \left(\frac{R_F}{R} + \frac{V_c}{V}\right)e^{\frac{-R}{R_D}}\right)$;

Gravity , Relativity and electricity together

Indentation after Space expanding: means more decreasing∈ energy density

(75) $E_P = \rho_s \int_0^\infty \left(\frac{V_c}{V}\right) e^{\frac{-R}{R_D}} 4\pi R^2\, dR$

(76) $E_P = \rho_s \int_0^\infty \left(\frac{3}{2}\left(\frac{x}{r}\right)^2 - \frac{1}{2}\left(\frac{x}{r}\right)^3\right) e^{\frac{-R}{R_D}} 4\pi R^2\, dR$

(77) *suppose* $\frac{x}{r} = \left(\frac{R_p}{R}\right)^{k'}$ find correct k'

(78) $p=1 \rightarrow 0<p\leq 2k'<3$ and $0<p\leq 3k'<3$

as we saw∈ gravity equations

(79) $\rightarrow k' = 1/2$;to have limited integral

(80) $\left(\frac{x}{r}\right)^2 = \frac{R_p}{R}$

(81) $\rightarrow$ $\frac{x}{r} = \left(\frac{R_p}{R}\right)^{0.5} = indentation\,actor$

(82) $E_P = \rho_s \int_0^\infty \left(\frac{3R_p}{2R} - \frac{1}{2}\left(\frac{R_p}{R}\right)^{3/2}\right) e^{\frac{-R}{R_D}} 4\pi R^2\, dR$

(83) $E_P = ¿\ 4\pi\rho_s\ \left(\frac{3}{2}R_P R_D^2 + \frac{1}{2}R_D^{1.5} R_D^{1.5}\,\Gamma\left(\frac{3}{2}\right)¿\right.$

(84) $E_P = ¿\ 4\pi\rho_s\ \left(\frac{3}{2}R_P R_D^2 + \frac{1}{2}R_D^{1.5} R_D^{1.5}\,\frac{\pi^2}{2}¿\right.$

(85) $E_P \approx 4\pi\rho_s$ ($\frac{3}{2} R_P R_D^2$¿ ;because $R_P << R_D$

(86) $E_P = \frac{3C^4}{4G} R_P$;because $C^4 = 8\pi G \rho_s R_D^2$

The caps save space to release energy for Ep but they can reduce the ramion's torque if they are not oriented in the same direction:

(87) $I = \frac{2}{5} m r^2$

Rotational inertia with a volumetric distribution:

(88) $I = \frac{2r^2}{5}\left(\Delta m = \frac{\rho_{r/2}}{c^2}\left(V_{cap} = V_r \frac{3}{4}\left(\frac{x}{r}\right)^2\right)\right)$

Vr: Ramion Volume

(89) $I = \frac{3}{20}\frac{E_s}{c^2}\left(\frac{R_p}{R}\right) r^2$; E_s: Ramion energy

Density ρ_r devided by 2 because only half of energy dedicated to rotation.

How is the electric field propagated in space—that is, in the Ramions?
As long as no other charged particle is present, the Ramions, by sharing the volume V_c, supply the electric potential energy Q_1; and since they become aligned, they perceive the same volume, pressure, and even the previous torque. Ramion theory makes possible the propagation of the static electric field, which is not possible with Photon, because photons can explain electromagnetic wave, not static electrical field.

Now suppose the charge $Q_2$is placed in this field. The twelve Ramions of the charge Q_2 cannot rotate freely along this path and align their torques; consequently, energy is required at the angle θ:

(90) $$E_{1\,Ramion}=\frac{1}{2}\left(\frac{3}{20}\frac{E_S}{c^2}\left(\frac{R_{P1}}{R}\right)r^2\right)\omega^2\cos\theta$$

(91) $$r\omega=c$$

(92) $$E_{1\,Ramion}=\frac{3}{40}E_S\left(\frac{R_{P1}}{R}\right)\cos\theta$$

(93) $$F_{1\,Ramion}=\frac{-dE}{dR}=\frac{3}{40}E_S\frac{R_{P1}}{R^2}\ \cos\theta$$

(94) Pressure: $$P_2=F_{1\,Ramion}\frac{\beta}{\pi r^2},\beta=\frac{10}{16\left(\frac{10\sqrt{2}}{8\pi}\right)^{\frac{2}{3}}}$$

(95) $$F_2=\int P_2=\frac{3}{40}eR_{st1}\frac{\beta}{\pi r^2}\left\{\frac{2\,V_2}{R^3}\right\}$$

(96) $$F2=\frac{6}{40}\frac{4\,rE_s\beta}{4\,r\pi r^2}\frac{2\,V_2}{R^3}\quad R_{p1}$$

(97) $$F2=\frac{16\beta}{40}\frac{E_s r\,V_2}{V_r}\quad\frac{R_{p1}}{R^3}$$;

(98) $$F_2=\frac{16\beta}{40}\hbar c\frac{R_{p1}}{R^3}$$;r=ħc/2 10^-17/36390=4.3 10^-14

Now we assume $Q1\gg Q2$

(99) $$\frac{Q_2}{R_{q2}}=\frac{Q_1}{R}$$

(100) $$F_2=\frac{16\beta}{40}(\hbar c)\frac{R_{p1}}{R^3=R^2\left(R=\frac{Q_1R_{q2}}{Q_2}\right)}$$

(101) $$F_2=\frac{16\beta}{40}(\hbar c)\left(\frac{Q_2R_{p1}}{Q_1R_{q2}}\right)\frac{1}{R^2}$$

To avoid being restricted to the condition $\left\langle \begin{matrix} Q_2 \ll Q_1 \\ R_2 \ll R_1 \end{matrix} \right\rangle$, and to make the forces $F_1 \wedge F_2$equal, we compute the geometric mean of $F_1 \wedge F_2$:

(102) $F = \sqrt{F_1 F_2} = \frac{1}{R^2} \frac{16\beta}{40} \hbar c \sqrt{\frac{R_{p1}}{R_{q1}} . \frac{R_{p2}}{R_{q2}}}$

(103) $F.R^2 = Q_1 Q_2 \frac{\hbar c (\frac{\beta}{40\pi} \frac{1}{\sqrt{1-\frac{E_s}{E_1}}} \frac{1}{\sqrt{1-\frac{E_s}{E_2}}})}{} = Q_1 Q_2 \ \hbar c \alpha$

(104) $\frac{1}{\alpha} = \frac{40\pi}{\beta = \frac{10}{16(\frac{10\sqrt{2}}{8\pi})^{2/3}}} \sqrt{1-\frac{E_s}{E_1}} \sqrt{1-\frac{E_s}{E_2}}$

when E_s, E_1, E_2 denote the Energy of ramion, Q1 , Q2 respectively ,Es means energy of ramion at far steady state space.

Ramion has no EPE (Electrical Potential Energy) anyway but EPE must be included in E1 and E2 because in Ramionics no particle even ramion considered as a dot.

We know the pure force between electron and neutron is zero So we can say DUE (down and up quarks and electrons) are similar (with same total E we name it E_{DUE}) with equal radius so their EPE=$kq^2/2r$ is proportional to q^2

if we name EPE of electron as $EEPE_e$ we have 3 equations for D U e

4.8 = E_{DUE} – $EPE_e \times (1/3)^2$

2.3 = E_{DUE} – $EPE_e \times (2/3)^2$

0.511 = E_{DUE} – EPE_e

We can fit a curve by keeping electron on the curve because its data are real measured and have more accuracy:

→ E_{DUE} =4.534 EPE_e =4.023

→ so without EPE we have E_D=4.087 E_U=2.746 Ee=0.511

We increase above data accuracy more in next parts.

For any DUE particles (of that generation we know)

(105) $\frac{1}{\alpha}=137.03976507112\sqrt{1-\frac{E_s}{E_{DUE}}}\sqrt{1-\frac{E_s}{E_{DUE}}}$ =

137.035999206

$\rightarrow\frac{E_{DUE}}{E_s}$= 36389.9823026906

$\frac{E_{DUE}}{E_s}$ must be whole number →$\frac{E_{DUE}}{E_s}=36390$

→ more precise $\frac{1}{\alpha}$ =$\beta=\frac{\frac{40\pi}{10}\left(1-\frac{1}{36390}\right)}{16\left(\frac{10\sqrt{2}}{8\pi}\right)^{\frac{2}{3}}}=¿$

137.0359920783

So in Ramionics not only we can calculate $\frac{1}{\alpha}$ but also we can correct its value

(106) $Ramion's Energy$ at far steady state space

$E_s=\frac{E_{DUE}}{36390}=\frac{4.534}{36390}$=124.59467 eV = 1.995748254 10^{-17} J

Explanation of matter–antimatter Asymmetry

Our Universe is similar to a Ramion—perhaps a ramion nested within its mother cosmos, with the possibility of an unbounded mother–daughter hierarchy, or even a recursion in which the whole curls back into its own core. In any case, the only plausible rationale for the breaking of matter–antimatter symmetry is that our Universe is currently performing the rotation.

If, in our surroundings (i.e., within the hemisphere of the Universe we inhabit), the rotation is such that a slight negative charge resides in the internal vacuum of space, then this small excess (together with electric-charge conservation) drives the heavier particles to become + and the lighter particles to become −.

Thus, in the other hemisphere of our universe, antimatter may perhaps dominate.

Therefore, if cosmological observations in our vicinity allow us to determine the prevailing direction of rotation, that direction, reflected within the ramion, can likewise indicate whether a clockwise produces of a ramion corresponds to positive or to negative charge.

Photon is not merely an electromagnetic wave; macroscopic bodies may likewise be regarded as hypothetical quanta. Accordingly, both material quanta and photon are, in essence, waves rather than particles. Under certain observational conditions, however, they may be perceived and registered as particles.

Photons and $\hbar$ in Ramionics

A single Ramion cannot act as a photon on its own, because it would have to change either its rotational speed or its direction of rotation, and it has no force to accomplish either.

Consequently, the electric field generated by the rotation of the Ramion—and, on larger scales, as described by the Maxwell's equations—by its own rotation gives rise to a magnetic field. However, since this energy transfer ultimately proceeds in the form of Ramion quanta, it can be regarded as a quantum of energy, termed photon. The energy of this photon is similar to the hypothetical Coriolis force:

(107) $F = m(c) \times w$

(108) $E = m(rv) \times w = mrc\, w = ¿$

$\hbar = mrc\,[reduced\,Planck\,constant] \rightarrow E = \hbar\, w\,[For\,photon]$

$[For\,real\,Ramion]\,\hbar c = mr\,c^2 = m\,c^2\,r = er$

Elementary particles, QFT, QCD and Strings Theory

Figure 2

In the ramion, not only the fine-structure constant but also the reason for the electric charges $0, \pm 1, \pm\frac{2}{3} \vee \frac{1}{3}$, the matter–antimatter asymmetry, and the specific masses of the elementary particles are readily calculable.
With the Ramion theory, the dynamics of ramion (elementary-particle) reactions can likewise be modelled with the highest conceivable precision.

In space geometry we saw $L(n)=10n^2+2$=(number of ramions of layer n) and

$T(n)=1+(10n^3+15n^2+11n)/3$=(number of ramions from centre to layer n).

Neutrinos are simple particles without electrical charge or any type of quark.

Neutrinos type A have two parameters n , k

NT(n/k) energy is E_s*T(n)/k

If k=1 then notation can be simpled to NT(n)

For example NT(4)=NT(4/1) is a particle with energy of Es*T(4)/1 =309Es

They are usually formed by collapsing layers 1 to n and making k neutrinos,

Neutrinos can be received or transmitted (radiated) in Ramionic reactions so they can have catalytic effect or start, Relax (Temporarily reduce speed to complete some stages like electrical charges stabling) and finally balance energy then stop a Ramionic reaction.

So we may have Neutrino Type B with any value of energy that can't be calculated as E_s*T(n)/k with n and k as whole numbers. So they are noted by only one parameter. For example NT4 is a particle with energy of 4Es.

So type B neutrino has no parentheses in our notation.

Strong layers: When Ramions (means Energy) is converting to matter particles, it means some ramions collapse and explode their energy into space consequently but Strong Layers protect space network and universe against full collapsing.

Calculating them needs huge computers but Ramionics suggests easiest way:

They are most similar layers to real Sphere so:

1-They are similar to layer 0 (solo centre) or 1(with 12 tangent Ramions) so their number is multiples of 12

2-They are similar to very large layers ($10n^2+2$) so their number is multiples of 10

Then we can conclude they are multiples of 60 but multiples of 120 are stronger anyway Layers 60 k are strong and layers 60k+30 are weak;

Under layer 120 curve is defined logarithmic volume instead of linear radius:

Strong layers: 1,3,5,7,9,11,15,18,23,30,37,47,60,75,95,120,… 60k,…

for layer 1 to 120: $T(s)=T(120)/\sqrt{2}^{\text{even number}}=T(120)/2^{\text{whole number}}$

Weak Layers: 2,4,6,8,10,13,16,21,26,33,42,53,67,85,107,150, …60k+30 ,…

for layer 1 to 120: $T(w)=T(120)/\sqrt{2}^{\text{odd number}}$

Layer 119 volume divider: $T(s)=T(119)/2^{n}$

1,3,5,7,9,11,14,18,23,29,37,47,59,75,94,119 **very similar** to strong layers under 120

if we draw a graph with 1 for strong layers and 0 for weak layer there is related to probability of having package of particles that need collapsing n-1 layers because layer n must stop ramion collapsing.

Above table shows that when reaction stops in layer 120 it means 119 layers are collapsed and energy distributed also the reaction had stops at layers 95,75,... and **in each stage energy is doubled**. This is dynamics of ramion reactions that convert energy to mass and reverse and explains why reaction expands with **factor 2^{stage}** and any particle packet has **2^{k}-1 factor**.

Barions generation g (type p, k) Means collapsing of ramions layers 1 to **120g-1**, stopped by layer **120g** to make:

p packages of Not-charged DUE (EPE equivalent included)

Any package can be (2^k-1) of DUE will be transformed to:

$(2^{k-1}-1)$ Up + $(2^{k-2}+1)$ Down + $(2^{k-2}-1)$ electron

that can be transformed to **$(2^{k-2}-1)$ (electron +proton) + 1 neutron** after giving (EPE energy to have electrical chargs) and getting extra energy from next layers (to have rotational magnetic energy).

Neutron to proton ratio in above combination is $(2^{k-2}-1)$ but other combination of (D U e) then (P N e) are possible:

Consider this equations:

$2^{k-1}=3$ (P + N) +e ; energy balance in production of DUE's

P=e **and** (2P + N)2/3 - (P + 2N)/3 - e/3=0 ; electrical charge balancing

P, N, e, k: natural number

P>N ; proton more than neutron

Then

for k<3 there is no answer

k=4 : only one answer: (3P 1N 3e) means (7U 5D 3e) means P/N:3

k=5: only one answers: (7P 1N 7e) means (15U 9D 7e) means P/N:7

k=5: only two answers:

(15P 1N 15e) means (31U 17D 15e) means P/N:15

(12P 5N 12e) means (29U 22D 12e) means P/N:12/5

Normal DUE are barions 1,5,5

Means package 15U+9D+7e that can generate 7(e+P)+1N

Energy balance:

T(119)=5688439=delta1+5*(delta5+31*(delta31+36390)

→

5688439=4+5*(18+31(36390+309)) ;309=NT(4)

36390 seems to be accurate because generated NT(4) has more than difference to NT(3)=147 or NT(5)=561

We obtained 36390 from geometry independently of fine structure constant.

In above equation DUE's are exactly same because they have no EPE (Electrical potential Energy) and E_{due} or 36390 includes it.

Energy of uncharged packet = E_{ncp}=31EDUE

After getting electrical charges means reducing particles energy:

$E_D=E_{DUE}$-EPE_e*1/9

$E_u=E_{DUE}$ - EPE_e *4/9

$Ee=E_{DUE}$ - EPE_e

Energy of charged packet = $E_{cp}=15E_u +9 E_d + 7 E_e$

E_{cp} =(31 Edue) – (15*4/9 +9*1/9 +7) EPE_e = E_{ncp} – (8+60/9) EPE_e

E_{ncp} =31EDUE E_{cp} = E_{ncp} -132/9 EPE_e

E_{ncp} =31*4.534=140.554MeV E_{cp} =140.554-132/9*4.023=81.55 MeV

We see one neutrino NT(4) is generated with any EUD in the major Ramionic reaction. some of generated neutrino continues this

reaction to more layers to convert DUE to NPE (Neutron proton electron) the others starts new reactions and remained neutrinos may be be radiated and even participate in Cosmic microwave Neutrino **CνB** or Cosmic microwave background **CMB.**

Layer 120 can not resist against explained reaxtion in the reaction continues to transform (Due's) Finally 7 electrons, 7 protons, 1 neutrons remains:

Final energy = E_F = 7*0.51099895069 +7*E_P +1*E_N

E_P=938.27208816 MeV

E_N=939.56542052 MeV

E_{Packet} =7(Ep+Ee)+En= 7511.0470302948 Mev

E_{5p}= (5)*7511.0470302948 Mev ;;;no packet added after layer 120

E_{5p} = 37555.235151474 Mev

E_s =124.59467 eV

IT(E_{5p} / E_s)=448

Final Stopping Layer=next stopping layer=480

Neutrino Energy to Barion Energy ratio=21.919794%

E_{6p} = (5+1)*7511.0470302948 Mev ;;;**one packet added after layer 120**

E_{6p} = 45066.2821817688 Mev

IT(E_{6p} / E_s)=448

Final Stopping Layer=next strong layer=480 so last collapsed layer is 479.

Neutrino Energy to Baryon Energy ratio=1.599828%

So Extra Packet is more compatible with current observations. in fact at Ramionic reactions **most similar, large, stable packets** and particles are produced. In the first case reaction has about 22% extra energy whit 5 packets so sixth packet have to generated before.

We can conclude that neutrino type B have a little life time and in Type A stable neutrino have k=1.

Stong layers are 1,3,5,7,9,11,15,18,23,30,37,47,60,75,95,120, ...60k,... so stable neutrinos are NT(2), NT(4), NT(6), NT(8),NT(10),...

So we can balance final energy:

we suppose D U e are unchanged and new particle called P and N are absorbing similar rotational energy saving magnetic energy named M for any proton or neutron

T(479)=367489759 Ramions

T(479)/6=61248293+1

Any packet energy: 61248293 Es

8M= 61248293 Es – Ecp   -31*N(4)

Es =124.59467 eV ;Ramions energy

Ecp= 81.55 MeV ;after having electrical charge E reduced

N(4)=309 Es ;Radiated before ending reaction

M=943.55 MeV

So

E_P=943.55+2(E_U=2.746)+(E_D=4.087)=953.129 MeV

E_N=943.55+1(E_U=2.746)+2(E_D=4.087)= 954.47 MeV

Higgs Boson:

IT(126 GeV/ Es)=671

Accurate Energy of Z Boson=T(660-1)*Es=119.130 GeV

Higgs boson is NT(659) ;no need to explain the mass in ramionics

ZBoson:

IT(91.2 GeV/ Es)=603

Accurate Energy of Z Boson=T(600-1)*Es= 89.484166 GeV

Z boson is NT(599)

W Boson:

IT(80.4 GeV/ Es)=578 not acceptable

IT(2*80.4 GeV/ Es)=728 ;we know they are couple

Accurate Energy of W Boson=T(720-1)*Es/2=77.346542 GeV

W bosons are generated in special reaction with two + - production.

;no need to explain the weak nuclear force in ramionics

Ramionics need no Energy or Force carrier or mass Producting particle or Dark matter or Dark energy. all of them simply are explained by Ramions. Other particle may be are wrong interpret or huge neutrino or complex particles. Bcause in Ramionics we now 12 ramions around any particle hole have electrical charge even on Neutral particles so any particle can have 12 bond with other particles. In proton and neutron central particle uses only 2 bonds.

Ramionics is compatible with QFD except that in Ramionics there is only one fluctuating field: Ramions,

Ramionics help QCD o do more effective calculation without gluon

Ramionic models space-Time particles but real and 3 Dimensional.

Cosmology and multiverse

In Ramin theory, bridges have been built not only between gravitation and electromagnetism (the so-called four fundamental forces) and between relativity and the quantum, without singularities for everything from the smallest particles to the largest black holes.

For example, the followings, relate dark matter and the energy density of space (e.g., dark energy):

(109) (far Gravity For k=1, p=1) $F = \frac{2GM}{C^2R}\left(\frac{1}{R}+\frac{1}{R_D}\right) e^{\frac{-R}{R_D}}$

(110) $R_D^2=\frac{C^4}{8\pi G\rho_s}$

This theory models matter, dark matter, and waves by altering the arrangement of Ramions, and therefore only the energy of space must be taken into account in calculations of the age and dimensions of the Universe.

Studies based on this theory open many avenues concerning the expansion of the Universe, the Big Bang, and cosmology, in addition to relativity, quantum theory, and elementary particles.

In Ramion Theory all of universe is filled by Ramion, Ramion and space energy density is same even close to matter, so **maybe** in calculation on Hubble constant H0 we have to consider Dark energy (= Space energy density) share as 100% means 14.46×10^9 year Universe age and 14.46×10^9 LY observable radius.

Ramin theory and philosophy

On the one hand, ramions remove the finger of God from the fine-structure constant and fine tuning, and place the burden upon geometry!

On the other hand, they indicate that our entire Universe could be a ramion within a more transcendent universe; conversely, our Universe may be the mother or daughter of other universes. Perhaps this chain is infinite, or perhaps it returns to itself—our Universe may be, for example, the mother of its own mother's mother.